



Amendments to the claims

Claim 1(currently amended): An apparatus for treating an exhaust gas in a passsge of the exhaust gas by installing a liquid-including substance which has at least partially liquid surface and can adhere to capture at least one of carbon-containing particle in the exhaust gas having at least one liquid selected from

the liquid containing a salt including oxygen acid radical of nitrogen in an amount exceeding a salt including carbonic acid radical dissolved in the liquid-including substance, and

the liquid containing a salt including oxygen acid radical of nitrogen having solid that can form the salt including oxygen acid radical of nitrogen by absorbing nitrogen oxides.

Claim 2(original): An apparatus according to claim 1, wherein the liquid-including substance is the liquid containing the salt including oxygen acid radical of nitrogen in the amount exceeding the salt including carbonic acid radical dissolved in the liquid-including substance.

Claim 3(original): An apparatus according to claim 1, wherein the liquid-including substance is the liquid containing the salt including oxygen acid radical of nitrogen having solid that can form the salt including oxygen acid radical of nitrogen by absorbing nitrogen oxides.

Claim 4(original): An apparatus according to claim1, wherein the salt including oxygen acid radical of nitrogen contains a salt including nitrate radical.

Claim 5(original): An apparatus according to claim 1, wherein the solid is the solid containing the salt including carbonic acid radical.

Claim 6(original): An apparatus according to claim 1, wherein the liquid is molten liquid.

Claim 7(original): An apparatus according to claim 1, wherein the liquid contains water.

Claim 8(original): An apparatus according to claim 1, wherein the salt including oxygen acid radical of nitrogen is hydrated salt.

Claim 9(original): An apparatus according to claim 1, wherein at least one of the salt including oxygen acid radical of nitrogen and the solid that can form the salt including oxygen acid radical of nitrogen includes at least one of metallic ions with the square root of the ionization potential smaller than 2.2.

Claim 10(original): An apparatus according to claim 1, wherein at least one of the salt including oxygen acid radical of nitrogen and the solid that can form the salt including oxygen acid radical of nitrogen includes at least one of metallic ions selected from group 1, group 2 and group 3 including rare earth elements in the periodic table.

Claim 11(original): An apparatus according to claim 1, wherein at least one of the salt including oxygen acid radical of nitrogen and the solid that can form the salt including oxygen acid radical of nitrogen includes at least one of metallic ions selected from sodium, potassium, magnesium and calcium.

Claim 12(currently amended): An apparatus according to claim 1, wherein at least one of the salt including oxygen acid radical of nitrogen and the solid that can form the salt including oxygen acid radical of nitrogen includes at least one of metallic ions selected from magnesium ~~and calcium~~.

Claim 13(previously presented) An apparatus according to claim 1, wherein the exhaust gas contact with the liquid-including substance in the presence of at least one of catalyst containing at least one selected from platinum, palladium, rhodium, copper, nickel, vanadium, cobalt, molybdenum, cerium, silver, iron, manganese and lead.

Claim 14(currently amended): An apparatus according to claim 1, wherein the apparatus is operated at a temperature higher than 100°C and lower than 300 °C.

Claim 15-17(canceled)

Claim 18(currently amended): An apparatus for treating an exhaust gas in a

passage of the exhaust gas by installing a liquid-including substance which has at least partially liquid surface and can adhere to capture at least one of carbon-containing particle in the exhaust gas, wherein a salt including oxygen acid of nitrogen in at least one state of at least partially molten state and at least partially dissolved state in the liquid and a salt including carbonic acid radical that is reactive with nitrogen oxides in the exhaust gas are present, whereby they may come into close contact each other.

Claim 19(currently amended): An apparatus ~~according to claim 1.~~ for treating an exhaust gas in a passage of the exhaust gas by installing a liquid-including substance which has at least partially liquid surface and can adhere to capture at least one of carbon-containing particle in the exhaust gas having at least one liquid selected from

the liquid containing a salt including oxygen acid radical of nitrogen in an amount exceeding a salt including carbonic acid radical dissolved in the liquid-including substance, and

the liquid containing a salt including oxygen acid radical of nitrogen having solid that can form the salt including oxygen acid radical of nitrogen by absorbing nitrogen oxides.

wherein the apparatus comprising:

a reaction zone device equipped with at least one pool where at least one exhaust gas blow nozzle is opened at least in the liquid-including substance and in the vicinity of the surface of the liquid-including substance in the pool, and with at least one capturing zone that captures entrainment of the liquid-including substance and constitutes a contacting surface area between the exhaust gas and the liquid-including substance,

~~an after treating device equipped with at least one water pool where at least one blow nozzle for the exhaust gas treated in the reaction zone is opened at least in the water and in the vicinity of surface of the water in the pool, and at least one capturing zone that captures entrainment of the water and constitutes a contacting surface area between the exhaust gas and the water, and~~

~~means for feeding water to the after treating device and sending the water contacted with the exhaust gas in the after treating device to the reaction zone device.~~

Claim 20(original): A vehicle equipped with the apparatus as claimed in

claim 1.

Claim 21(currently amended): An apparatus according to claim[[1]]19, wherein the apparatus further comprising:

~~a reaction zone device equipped with at least one pool where at least one exhaust gas blow nozzle is opened at least in the liquid including substance and in the vicinity of the surface of the liquid including substance in the pool, and with at least one capturing zone that captures entrainment of the liquid including substance and constitutes a contacting surface area between the exhaust gas and the liquid including substance, and~~

means for feeding water to the reaction zone device.

Claim 22(new): An apparatus according to claim 19, wherein the apparatus further comprising:

an after-treating device equipped with at least one water pool where at least one blow nozzle for the exhaust gas treated in the reaction zone is opened at least in the water and in the vicinity of surface of the water in the pool, and at least one capturing zone that captures entrainment of the water, and

means for feeding water to the after- treating device and sending the water contacted with the exhaust gas in the after-treating device to the reaction zone device.

Claim 23(new): An apparatus according to claim 19, wherein the apparatus further comprising:

an after-treating device equipped with solid carbon.